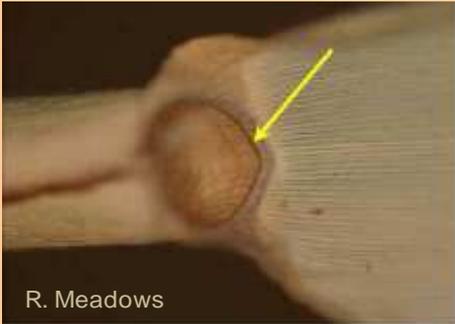
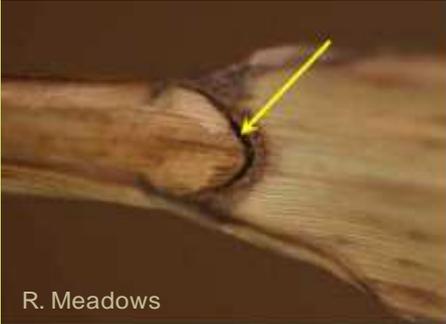
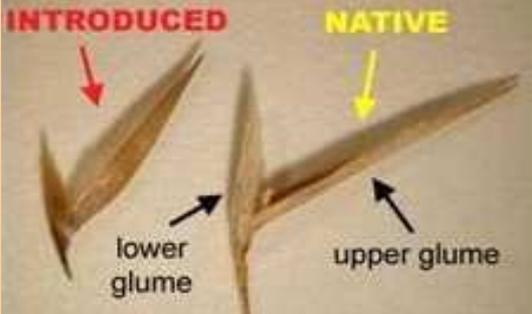
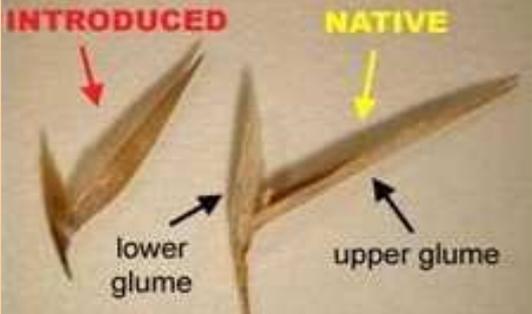


## Characteristics to differentiate introduced and native *Phragmites*

If the population has at least two characteristics from Group A and three characteristics from Group B (reverse), the population is most likely introduced.

### GROUP A

	<b>INTRODUCED</b> <i>Phragmites australis</i> ssp. <i>australis</i>	<b>NATIVE</b> <i>Phragmites australis</i> ssp. <i>americanus</i>
<b>LEAF SHEATHS</b>	Tightly clasping, hard to pull off, abundant  R. Meadows	Easily pulled off, sparse, loosely attached  R. Meadows
<b>STEM DENSITY</b>	Monotypic, dense, excludes other plant species  R. Crawford	Not monotypic, other plant species incorporated  R. Meadows
<b>LIGULE WIDTH</b> (ligule: membranous outgrowth where leaf sheath meets culm or stem)	Narrow: 0.4 - 0.9mm  R. Meadows	Wide: 1.0 - 1.7mm  R. Meadows
<b>GLUME LENGTH</b> (glume: the outermost and lowest bracts of a floret)	Shorter: Upper Glume 4.5-7.5mm Lower Glume 2.5-5.0mm  K. Saltonstall	Longer: Upper Glume 5.5-11.0mm Lower Glume 3.0-6.5mm  K. Saltonstall

GROUP B		
	INTRODUCED	NATIVE
STEM HEIGHT	3-6 meters	1-4 meters
STEM TEXTURE	Raised ridges running vertically on stem	Smooth, no ridges
STEM-SPOTS	Typically no spots present	Small, round, dark fungal spots may be present
RHIZOME SIZE & SHAPE	Squashed or compressed (oval), >15mm in diameter	Round, <15mm in diameter
STEM COLOR AT BASE (during growing season)	Typically all green	Typically green with maroon or brown
LEAF COLOR	Blue-green 	Yellow-green, usually lighter than introduced  R. Meadows
INFLORESCENCE SIZE	Typically larger than native	Typically smaller than introduced
CLONAL EXPANSION RATE	Very rapid	Slow and steady

Characteristics described here were compiled from:

- Saltonstall, K. Plant Conservation Alliance's Alien Plant Working Group Least Wanted Fact Sheet: Common Reed - *Phragmites australis* <http://www.nps.gov/plants/ALIEN/fact/phau1.htm>
- Ecology and Management of Invasive Plants - Morphological differences between native and introduced genotypes <http://invasiveplants.net/phragmites/morphology.htm>

Photos reproduced with permission from Kirstin Saltonsall, Richard Meadows, and Tim Butler

Information on Oregon *Phragmites* populations (native and introduced) is important!  
Submit *Phragmites* plant samples for determination or provide location information to  
Vanessa Howard Morgan  
Center for Lakes and Reservoirs, PSU  
vhoward@pdx.edu / (503) 725-2937